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(11)

EP 0 844 659 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
17.11.1999 Bulletin 1999/46

(51) Int Cl.⁶: H01L 21/68

(43) Date of publication A2:
27.05.1998 Bulletin 1998/22

(21) Application number: 97309498.0

(22) Date of filing: 25.11.1997

(84) Designated Contracting States:
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: 25.11.1996 US 755716

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(54) Puncture resistant electrostatic chuck

(57) A puncture resistant electrostatic chuck (20) is described. The chuck (20) comprises at least one electrode (25); and a composite insulator (30) covering the electrode. The composite insulator comprises a matrix material having a conformal holding surface (50) capable of conforming to the substrate (35) under application

of an electrostatic force generated by the electrode to reduce leakage of heat transfer fluid held between the substrate and the holding surface. A hard puncture resistant layer, such a layer of fibers or an aromatic polyamide layer, is positioned below the holding surface (50) and is sufficiently hard to increase the puncture resistance of the composite insulator.

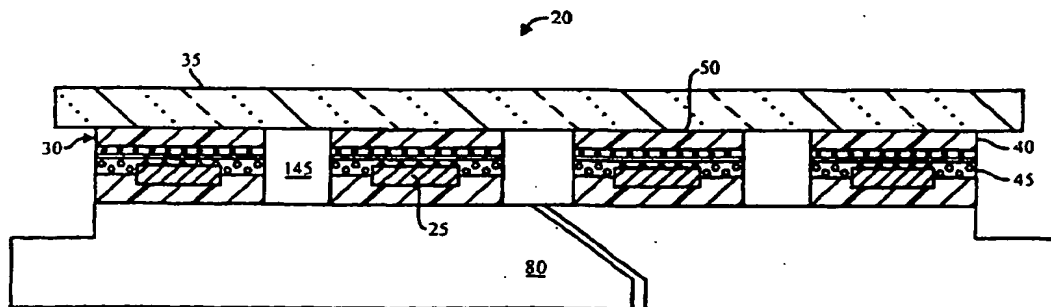


Fig. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 97 30 9498

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28 September 1999	Examiner Kirkwood, J
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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